SOLID FUEL WOOD COOKER STOVE
WITH BACK BOILER
FOR CENTRAL HEATING

ALFA 70 ET, ALFA 70 EF,
ALFA 90 HET, ALFA 90 HEF



INSTALLATION AND MAINTENANCE MANUAL

TECHNICAL DATA:

TYPE	ALFA 70ET ALFA 70EF	ALFA 90HET ALFA 90HEF
Nominal heat output (kW) – split logs / brown coal briquettes	12.05 / 12.7	14.39 / 14
Heat output to the room (kW) – split logs / brown coal briquettes	4.5 / 4.92	7.41 / 6.81
Heat output to the water (kW) – split logs / brown coal briquettes	7.55 / 7.78	7.98 / 7.19
Flue gas temperature (°C) – split logs / brown coal briquettes	259 / 237	223.5 / 195.5
CO content (at O_2=13%) – split logs / brown coal briquettes	0.43 / 0.22	0.30 / 0.22
Efficiency (%)	69 / 70.6	78.49 / 77.6
Required chimney draught (Pa)	10	12
Maximum operating pressure (bar)	2.5	2.5
Maximum operating temperature (°C)	90	90
Stove dimensions W x D x H (mm)	700x600x850	900x600x850
Oven dimensions W x D x H (mm)	330x440x260	460x440x260
Flue outlet diameter (mm)	120	120
Height from floor to flue outlet axis (mm)	690 – side 430 – rear	690 – side 430 – rear
Water jacket (boiler) volume (l)	5.5	5.5
Product weight (kg)	130	160
Heated volume (m^3)	120 – uninsulated 150 – insulated	120 – uninsulated 150 – insulated

INTENDED USE

This long-burning solid fuel heating stove is designed for heating flats and detached houses. It is mainly installed as a stove for single-storey central heating, but it can also be connected to a central heating system.

A special feature of these cooker stoves is the built-in cooling coil (copper pipe) which, when connected to a thermal safety valve (Figures 3 and 3a, item 13), serves as a safety device in the event of the stove overheating. Installing a thermal safety valve in a closed heating system is **MANDATORY**. In an open heating system, installing a thermal safety valve is not mandatory. To ensure correct operation of the stove, the user must observe all the requirements of this manual.

The thermal safety valve is not supplied with the stove



Figure 2

1) Firebox door
2) Cooking plate cover
3) Ash pan door
4) Oven door
5) Protective cover of the cleaning opening
6) Fuel drawer
7) Flue outlet (flue gas connection)

CONNECTION TO THE CHIMNEY

Unpack the stove, inspect it and familiarise yourself with its parts and accessories, paying particular attention to the following:

- The doors and the cooking plate cover must be well sealed to prevent uncontrolled air from entering the stove.
- The power regulator must open and close the regulator flap correctly via the regulating knob (Figure 5, item 1).
- The chimney connection must be well sealed with asbestos tape when moved to the side or to the rear, depending on the position relative to the chimney.

The stove reaches its nominal heat output at a chimney draught of 10 or 12 Pa, depending on the stove type. To achieve this draught, we recommend the following chimney dimensions:

STOVE MODEL	**CHIMNEY HEIGHT (m)**			
	6	7	8	9
	CLEAR OPENING DIMENSIONS (mm)			
ALFA 70E	140x140	Ø120	Ø120	Ø120
ALFA 90HE	140x140	140x140	Ø120	Ø120

SPECIAL INSTRUCTIONS

1) The chimney connection must be made rising upwards;
2) The flue outlet, flue pipes and chimney must have no narrowing;
3) All connections, as well as the chimney, must be well sealed and the flues free of soot and dirt.

A correctly built chimney and compliance with the other requirements ensure trouble-free operation of the stove.

The stove can be installed in a kitchen unit or in another suitable place, taking care to place it on a non-combustible base. If the floor is parquet, a special metal plate must be placed on it to prevent fire due to careless use.

INSTALLING THE STOVE IN A HOT WATER HEATING SYSTEM

The stove is designed mainly for single-storey hot water heating, but it can also be connected to a central heating system in accordance with the standards applicable in this case, JUS.M.E7.201 and JUS.M.E7.202. For the flow and return of the single-storey (central) heating system, the boiler has R1" connections, and for the cooling water supply an R½" connection (for connecting the thermal safety valve). The diagrams for connecting the stove to a single-storey heating system are shown below.

IMPORTANT!

The stove must be installed by a qualified specialist in accordance with the relevant design. The stove is designed so that it can be connected to a closed or an open heating system. All connections must be well sealed and tightened. Before commissioning, the entire system must be pressure-tested with water at 2.4 bar.

CONNECTION DIAGRAM FOR AN OPEN SYSTEM

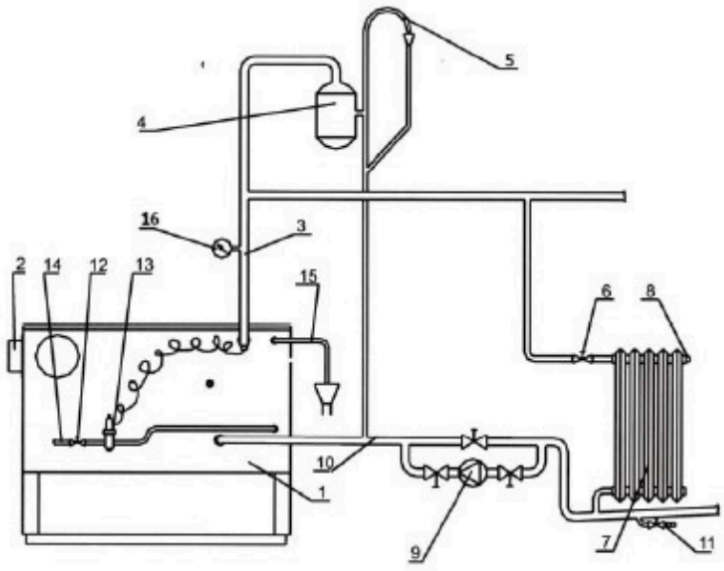


Figure 3

1) Boiler (water jacket)
2) Flue outlet
3) Flow line
4) Open expansion vessel
5) Safety (vent) pipe
6) Radiator valve
7) Radiator
8) Air vent
9) Circulation pump
10) Return line
11) Fill and drain valve
12) Regulating valve
13) Thermal safety valve
14) Mains water connection
15) Hot water outlet
16) Pressure gauge

CONNECTION DIAGRAM FOR A CLOSED SYSTEM

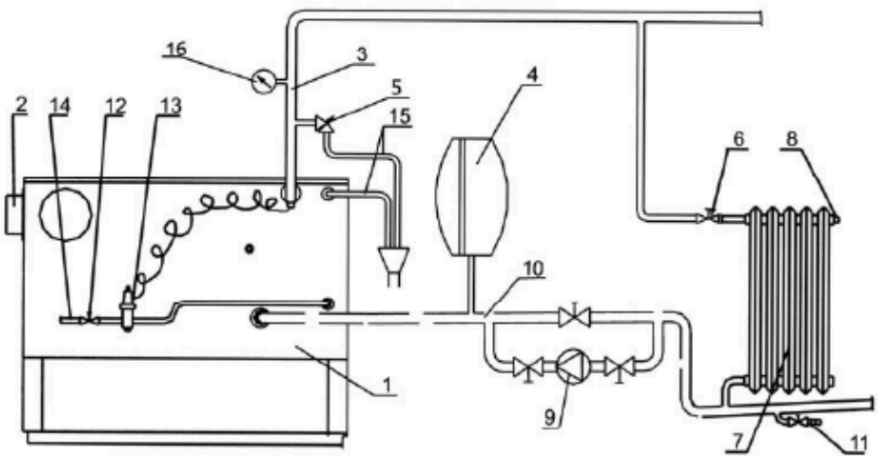


Figure 3a

1) Boiler (water jacket)
2) Flue outlet
3) Flow line
4) Expansion vessel
5) Safety valve
6) Radiator valve
7) Radiator
8) Air vent
9) Circulation pump
10) Return line
11) Fill and drain valve
12) Regulating valve
13) Thermal safety valve
14) Mains water connection
15) Hot water outlet
16) Pressure gauge

COMMISSIONING AND LIGHTING

Before lighting, the entire single-storey (central) heating system must be filled with water and properly bled, and the stove must be correctly connected to the chimney.

When the system is cold, the power regulator flap at the rear of the stove must be open. The start-up damper on the cooking plate is set to position “0”. Once the stove is burning well, the regulator flap is set to a suitable position according to the chimney draught and the desired output, and the start-up damper on the plate is set to position “Z”.

The stove is lit like all long-burning solid fuel stoves. Paper and finely split wood are placed on the grate and lit. Once they are burning well, the stove is loaded with wood or coal, and after half an hour the power regulator is set to the desired temperature.

Loaded in this way, the stove burns for 1 to 6 hours, depending on the burning intensity and the temperature regulator setting. Burning organic waste (plastic bags, bones and the like) is not recommended, as tar then builds up on the flue walls and can cause a fire.

After each loading, it is recommended to let the stove burn for at least half an hour at maximum output, because at the start all the volatile components of the fuel burn off, and these are the main cause of condensation in the stove.

USING THE GRATE IN THE UPPER POSITION

For cooking, baking and heating in the transitional seasons, the upper position of the grate (Figure 4, item 1) is used, so that the flame reaches the plate directly, saving on cooking, baking and heating costs.

The stove is supplied with the grate in the lower position. To move the grate from the lower to the upper position, proceed as follows:

- Remove the pin (Figure 4, item 4) that connects the air supply plate to the grate support (Figure 4, item 2);
- Pull the air supply plate (Figure 4, item 3) out of the firebox;
- Push the grate all the way back, lift it up through the ash pan and remove it. Then lift and remove the grate support (Figure 4, item 2);
- Insert the shaking lever into the corresponding opening at the front and lift the grate slightly through the ash pan so that the grate's tooth engages in the opening of the shaking lever;
- To return the grate to the lower position, proceed in reverse order.

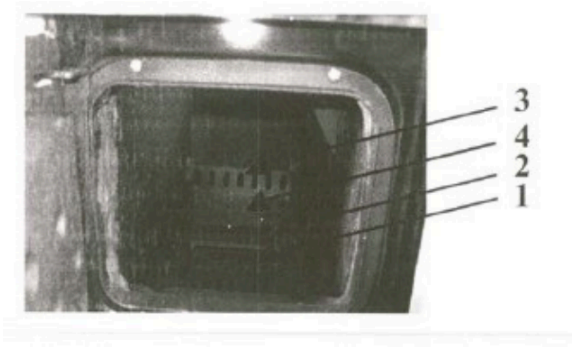


Figure 4

1) Grate
2) Grate support
3) Air supply plate
4) Pin

AUTOMATIC REGULATION

The heat output of the stove is regulated by a power regulator, which automatically controls the opening of the regulator flap depending on the setting of the regulating knob (Figure 5, item 1) and the water temperature. The regulating knob has several positions, marked on the stove frame, as follows:

Position of the regulating knob	0	3	4	5	7	9
Water temperature in the stove (°C)	Regulator closed	30	40	50	70	90



Figure 5

1) Regulating knob
2) Special key or screwdriver

The air flap of the power regulator fully controls the combustion air supply if the other openings are closed.

SECONDARY AIR

Secondary air regulation is shown in Figure 6. Secondary air is adjusted with a lever on the inside of the firebox door. The inside of the door is clearly marked 0 – 1. Moving the lever towards 0 reduces the amount of secondary air; moving it towards 1 increases it.

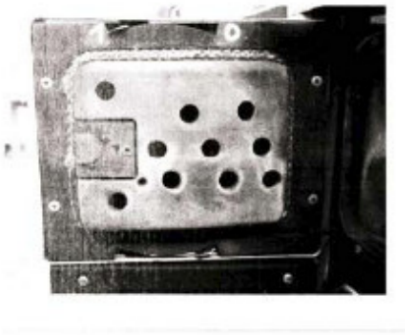


Figure 6

START-UP DAMPER (HEATING DAMPER)

The damper is operated with the knob (Figure 7) located above the oven door. Depending on the position of the knob, the damper is open or closed. The damper serves to shorten the path of the flue gases during lighting. It must be open only while the stove is being lit. Once the stove is burning well – after 15–20 minutes – the damper must be closed. If the damper is not closed, baking in the oven is more difficult, the water in the boiler heats up less and fuel consumption increases.

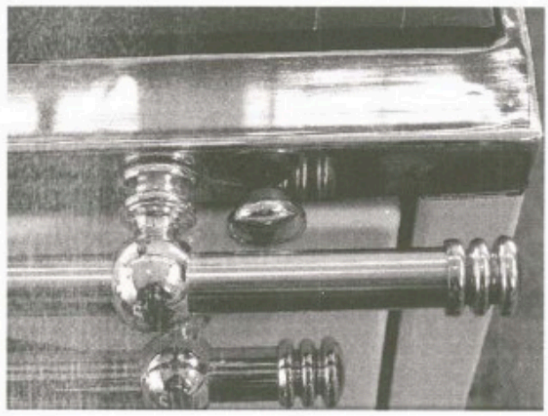


Figure 7

COOKING, BAKING AND FRYING

During the heating season, the stove is used mainly for heating. For this purpose, the grate is in the lower position. For faster baking, cooking and frying, burn wood.

The start-up damper must be closed and the power regulator open. When you have finished baking, cooking and frying, set the power regulator to the desired position.

FIREBOX DOOR HANDLE

If the firebox door handle becomes too hot, the door should only be opened and closed using the special key from the accessory kit (Figure 8).

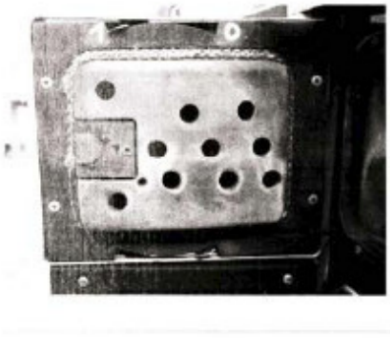


Figure 8

CLEANING AND MAINTENANCE

Before each refuelling, the grate must be cleaned with a scraper through the ash pan door. The ash pan must be emptied once a day, and larger residues (slag) are removed by opening the ash pan door. All stove surfaces in contact with flue gases must be regularly maintained and cleaned with a scraper and a cleaning brush. Clean heating surfaces ensure economical operation of the stove. It is recommended to clean the stove once a month, or more often if necessary.

The enamelled surfaces of the stove and its frame are cleaned with a damp cloth and mild cleaning agents. The stove plate is cleaned periodically with fine sandpaper and, during longer periods of non-use, coated with vegetable oil. Do not throw any waste into the stove outside the operating period.

Cooling the stove with forced draught and pouring water into the firebox are prohibited.

CLEANING OPENING

Behind the protective cover of the cleaning opening there is another cover (Figure 9). It is fastened to the front of the stove with a single wing screw and must be removed to clean the stove. Before it is fastened again, check that the sealing rope of the cover still seals properly and replace it if necessary.

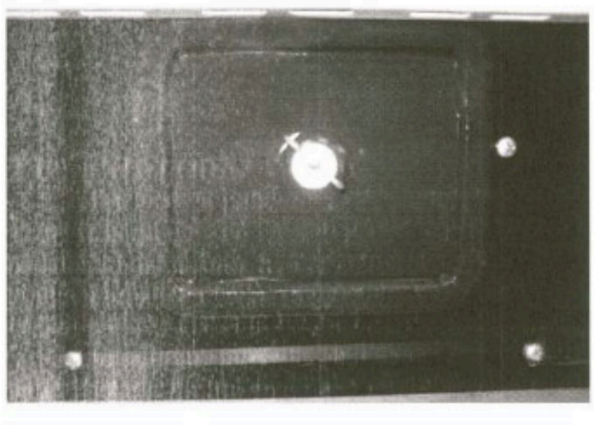


Figure 9

OFF-SEASON CARE OF THE STOVE

At the end of the heating season, the stove must be cleaned of ash and soot. The water is drained only if repair work on the system is required. If the system will not be used during the heating season, it must be filled with an appropriate amount of antifreeze or the water must be drained to prevent freezing.

HOT WATER PREPARATION

Stove type “KVŠ-90E” has a built-in additional water heater, which is used to prepare hot water.

GUARANTEED SERVICE PERIOD

This is the period during which we guarantee servicing, accessories and spare parts, counted from the date of purchase of the appliance.

The guaranteed service period complies with the applicable legal regulations. If the model and design of the appliance change, parts with a changed design are replaced within the statutory period. After this period expires, we supply the changed parts in their new version.

WARRANTY CONDITIONS

The product warranty is valid for the statutory period.

The warranty does not cover the glass, the glass-ceramic panel or physical damage occurring after purchase.

THE MANUFACTURER RESERVES THE RIGHT TO MAKE CHANGES.

The appliance will work correctly during the warranty period only if it is used in accordance with these connection and operating instructions.

The warranty is void if it is found that:

- the product was connected or repaired by an unauthorised person, i.e. non-original parts were fitted;
- the appliance was not used correctly, in accordance with these instructions;
- mechanical damage to the appliance occurred during use;
- defects were repaired by an unauthorised person;
- the appliance was used for commercial purposes;
- the damage occurred during transport after the sale of the appliance;
- the defects arose from incorrect installation, incorrect maintenance or mechanical damage by the buyer;
- the defect arose from excessive or insufficient output, or from force majeure.

We can also repair defects in your appliance after the warranty period has expired, using original spare parts, for which we provide a warranty under the same conditions.

This warranty does not exclude or affect the consumer’s rights regarding the conformity of goods under the legal regulations. If the delivered product does not conform to the contract, the consumer has the right to ask the seller to remedy the non-conformity free of charge by repairing or replacing the product in accordance with the applicable legal regulations.